

Exhibit 1.2.14: Relative Achievement in Mathematics Cognitive Domains

Country	Overall Mathematics Average Scale Score	Knowing (60 Items)		Applying (91 Items)		Reasoning (49 Items)	
		Average Scale Score	Difference from Overall Score	Average Scale Score	Difference from Overall Score	Average Scale Score	Difference from Overall Score
<sup>3</sup> Singapore	605 (6.1)	606 (6.4)	1 (1.5)	611 (6.0)	6 (1.5) ▲	600 (6.6)	-6 (1.5) ▼
Chinese Taipei	602 (3.1)	611 (3.2)	8 (1.3) ▲	601 (3.0)	-2 (1.4)	600 (2.8)	-2 (1.0)
Korea, Rep. of	596 (3.0)	602 (3.1)	6 (1.5) ▲	596 (2.9)	0 (1.0)	592 (3.2)	-4 (1.1) ▼
<sup>†</sup> Japan	595 (3.0)	591 (2.8)	-4 (1.5)	594 (2.7)	-1 (1.3)	591 (3.2)	-4 (1.0) ▼
<sup>†</sup> Hong Kong SAR	575 (5.0)	580 (5.0)	5 (0.7) ▲	575 (5.1)	0 (1.0)	569 (5.1)	-5 (2.0) ▼
<sup>2</sup> England	525 (4.5)	528 (4.4)	3 (0.9) ▲	530 (4.5)	5 (1.3) ▲	516 (4.9)	-9 (1.8) ▼
Ireland	522 (2.7)	520 (3.3)	-1 (1.6)	526 (2.8)	5 (1.2) ▲	516 (3.0)	-6 (1.9) ▼
<sup>2</sup> Czech Republic	518 (2.3)	514 (2.3)	-4 (1.0) ▼	518 (2.3)	0 (0.9)	524 (2.1)	6 (0.6) ▲
<sup>2</sup> Sweden	517 (2.4)	518 (2.2)	1 (1.1)	518 (2.3)	0 (0.9)	515 (2.6)	-2 (1.4)
<sup>2</sup> Lithuania	514 (3.1)	510 (3.2)	-3 (0.8) ▼	516 (3.1)	3 (0.8) ▲	514 (3.0)	1 (1.2)
<sup>2</sup> Austria	512 (2.3)	517 (2.3)	4 (1.7) ▲	509 (2.7)	-3 (1.9)	512 (2.5)	0 (1.6)
Australia	509 (3.5)	508 (3.5)	-1 (1.5)	511 (3.6)	2 (1.0)	504 (3.6)	-5 (1.2) ▼
<sup>3†</sup> Türkiye	509 (4.3)	505 (4.6)	-4 (1.7)	510 (4.4)	1 (1.6)	511 (4.4)	3 (1.5)
Hungary	506 (3.7)	507 (3.8)	1 (1.0)	504 (3.8)	-2 (1.0)	507 (3.6)	1 (1.0)
Finland	504 (2.6)	505 (2.5)	2 (0.9)	504 (2.6)	0 (0.7)	501 (3.0)	-2 (1.8)
<sup>2</sup> Norway (9)	501 (2.3)	500 (2.1)	0 (0.8)	502 (2.2)	1 (0.8)	501 (2.9)	1 (2.0)
Italy	501 (3.0)	499 (2.9)	-2 (0.8)	498 (3.0)	-2 (1.1)	511 (3.1)	11 (1.4) ▲
Malta	499 (1.2)	507 (1.3)	8 (1.1) ▲	500 (1.3)	1 (1.0)	492 (2.0)	-8 (1.6) ▼
<sup>≡</sup> Romania	496 (4.9)	502 (5.0)	7 (1.2) ▲	493 (4.8)	-3 (1.3)	498 (4.7)	3 (1.5)
Cyprus	494 (2.7)	503 (2.5)	9 (1.0) ▲	492 (2.7)	-1 (1.1)	491 (2.9)	-3 (1.4)
United Arab Emirates	489 (1.7)	495 (1.8)	7 (0.6) ▲	482 (1.8)	-6 (0.3) ▼	485 (1.8)	-4 (0.4) ▼
<sup>≡</sup> United States	488 (4.2)	496 (4.5)	8 (1.0) ▲	484 (4.4)	-4 (1.1) ▼	480 (4.2)	-8 (0.9) ▼
<sup>3</sup> Israel	487 (3.9)	491 (3.9)	4 (1.1) ▲	486 (3.6)	-1 (1.2)	488 (4.1)	1 (1.3)
France	479 (3.1)	477 (3.1)	-2 (1.0)	480 (3.0)	1 (1.0)	487 (3.3)	8 (0.9) ▲
Azerbaijan	479 (3.7)	497 (3.7)	18 (1.3) ▲	480 (3.6)	1 (1.4)	473 (3.7)	-6 (1.7) ▼
Portugal	475 (2.7)	466 (2.9)	-10 (0.9) ▼	477 (2.3)	2 (1.2)	490 (2.7)	14 (1.5) ▲
<sup>1</sup> Georgia	467 (3.2)	469 (3.1)	2 (1.0)	472 (2.8)	5 (1.7) ▲	466 (3.4)	0 (1.3)
Kazakhstan	454 (3.5)	450 (3.7)	-5 (1.7) ▼	457 (3.3)	3 (1.4)	453 (3.5)	-1 (1.5)
Qatar	451 (4.2)	455 (4.5)	3 (1.5)	445 (4.4)	-6 (1.1) ▼	445 (4.4)	-6 (1.7) ▼
Bahrain	426 (2.4)	427 (2.7)	1 (1.1)	420 (3.1)	-6 (1.8) ▼	420 (3.5)	-7 (2.7)
<sup>ψ</sup> Iran, Islamic Rep. of	423 (3.6)	406 (4.4)	-18 (2.0) ▼	423 (3.2)	0 (1.0)	433 (3.7)	9 (1.5) ▲
Uzbekistan	421 (4.3)	416 (5.1)	-5 (1.8) ▼	423 (4.0)	3 (1.5)	418 (5.0)	-3 (2.4)
<sup>†</sup> Chile	416 (3.2)	416 (2.7)	0 (2.3)	419 (2.8)	3 (1.2)	434 (2.8)	18 (2.4) ▲
Oman	411 (2.7)	415 (2.9)	4 (0.8) ▲	401 (3.0)	-10 (1.4) ▼	404 (3.0)	-7 (1.1) ▼
Malaysia	411 (3.5)	392 (4.0)	-19 (0.9) ▼	409 (3.6)	-2 (0.8)	405 (3.6)	-5 (1.2) ▼
<sup>ψ</sup> Kuwait	399 (5.2)	374 (7.0)	-25 (3.4) ▼	406 (4.9)	8 (1.7) ▲	393 (5.8)	-6 (2.5)
<sup>2</sup> Saudi Arabia	397 (3.3)	393 (3.6)	-3 (1.5)	390 (3.7)	-6 (1.7) ▼	379 (4.3)	-18 (2.4) ▼
<sup>ψ</sup> South Africa (9)	397 (3.1)	397 (3.4)	1 (1.1)	398 (3.0)	2 (1.0)	377 (3.6)	-19 (1.4) ▼
Jordan	388 (3.2)	389 (3.5)	1 (1.8)	376 (3.5)	-12 (1.7) ▼	377 (3.7)	-11 (2.0) ▼
Morocco	378 (3.0)	374 (3.6)	-3 (1.1) ▼	376 (3.2)	-2 (1.6)	391 (3.4)	13 (1.7) ▲
<sup>ψ</sup> Palestinian Nat'l Auth.	382 (3.0)	--	--	--	--	--	--
<sup>ψ</sup> Brazil	378 (2.8)	--	--	--	--	--	--
<sup>≡</sup> New Zealand	485 (4.1)	476 (4.8)	-9 (2.2) ▼	491 (4.1)	5 (1.5) ▲	487 (4.2)	1 (1.2)
<sup>✕</sup> Cote d'Ivoire	263 (4.9)	--	--	--	--	--	--
<b>Benchmarking Participants</b>							
Dubai, UAE	546 (2.8)	550 (2.8)	4 (0.9) ▲	544 (3.0)	-1 (1.0)	544 (2.8)	-2 (0.8)
Sharjah, UAE	496 (4.8)	504 (4.9)	8 (1.6) ▲	489 (4.9)	-7 (0.8) ▼	493 (5.1)	-2 (1.5)
Abu Dhabi, UAE	454 (2.8)	461 (3.0)	7 (1.1) ▲	445 (2.9)	-9 (0.6) ▼	448 (3.1)	-6 (1.0) ▼

▲ ▼ Subscale score significantly different from overall score ( $p < 0.01$ )

Numbers of items are based on the TIMSS 2023 eighth-grade mathematics items included in scaling.

( ) Standard errors appear in parentheses. Because of rounding some results may appear inconsistent.

See Appendix B.7 for population coverage notes 1, 2, and 3. See Appendix B.10 for sampling guidelines and sampling participation notes †, ‡, and ≡.

<sup>ψ</sup> Reservations about reliability because the percentage of students with achievement too low for estimation exceeds 15% but does not exceed 25%.

<sup>✕</sup> Average achievement not reliably measured because the percentage of students with achievement too low for estimation exceeds 25%.

A dash (-) indicates comparable data not available because average achievement could not be accurately estimated.

New Zealand did not satisfy guidelines for minimum school participation rates. Achievement could not be reliably estimated for Cote d'Ivoire.